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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

OFFICIAL

Applicant: M. Masters et al.

Certificate of Transmission
Pursuant to 37 C.F.R. § 1.8

Serial No.: 09/944,314

For: Processes for texturing the surface
of a hearing instrument

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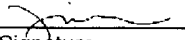
Filed: August 31, 2001

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Signature

July 27, 2004
Date of Signature

Att'y Dkt.: 2001 P 16282 US

Brief on Appeal

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Via Facsimile Only

Sir:

This brief is in support of the applicant's July 27, 2004 notice of appeal of the second, non-final rejection of the claims.

Real Party in Interest

Siemens Hearing Instruments, Inc., Piscataway, NJ.

Related Appeals and Interferences

Application No. 09/944,315, notice of appeal and appeal brief filed May 4, 2004.

Status of Claims

Claims 1-3, 5-10, and 12-17 are pending in this application. In the second, non-final office action mailed May 18, 2004:

1) claims 1, 2, 8, and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by the specification, page 1 (not page 2), lines 4-10 (office action, ¶ 2);

2) claims 1-3 and 8-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,567,871 (Walter) (office action, ¶ 3);

3) claims 1-3 and 8-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,581,627 (Bowser et al.) (office action, ¶ 4);

4) claims 1-3, 6, 8-10, 13, and 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,803,853 (Hoerkens) (office action, ¶ 5);

5) claims 1, 2, 4, 8, 9, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,097,825 (Yoest et al.) (office action, ¶ 6) [note: claims 4 and 11 were cancelled in the preceding amendment and will not be addressed here];

6) claims 1-3, 5, 7-10, 12, and 14-17 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,595,317 (Widmer et al.) (office action, ¶ 7); and

7) claims 6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,595,317 (Widmer et al.) in view of U.S. Patent No. 4,803,853 (Hoerkens) (office action, ¶ 9).

All of the rejections of the claims are appealed.

Status of Amendments

No amendments were submitted after the final rejection.

Summary of the Invention

Hearing devices inserted in a user's ear typically have a smooth or glossy finish, and the manufacturing process often includes a polishing phase to maintain such a finish. Although this may provide an aesthetically pleasing appearance, the instrument may have a tendency to slip out unless sized to create an interference fit, which could cause discomfort. Also, a shiny, light-reflective surface will make the presence of the unit in one's ear obvious to others.

To prevent the hearing instrument from slipping out of the ear and to create an outward appearance that blends with the wearer's ear, the outer surface of a hearing instrument shell is given a textured, non-smooth finish.

While the claims in the related application (no. 09/314,415) are directed to the structure - a textured hearing instrument or shell, this application is directed to the method of imparting or creating such a texture on the surface of a hearing instrument or hearing instrument shell.

Issues

The claims are not anticipated nor rendered obvious because they have not been properly construed and the cited references fail to disclose all of the claimed elements.

In the first office action, the claims were rejected under §§ 102 and 103 based on three references. In response, the applicants pointed out that the prior art rejections were formulated on an improper construction of the claims -- an overly-broad interpretation of the term "texture." The application specifically delineates the meaning of the term "texture" and the method of applying a texture to a hearing instrument or shell. As a direct consequence of not properly construing the terms of the claims, the references fail to meet the claim limitations, namely, they do not disclose the applicants' texture.

Notwithstanding the applicants' argument, the second office action repeated the very same art rejections, adding two more based upon art even further removed from the subject matter of the invention. As explained below, these two additional citations and rejections suffer from the same infirmity as the others. The weakness of these rejections is underscored by the non-final stature of the second office action.

The applicants have already demonstrated the inappropriateness of the art cited herein, but this art has been cited once again. The issue on this point has therefore been joined and, rather than reiterate unsuccessful arguments in a response to the outstanding office action, the applicants have elected to utilize their appeal rights.

Grouping of Claims

The claims fall roughly into three groups: claims 1-7 are directed to a method for fabricating a hearing instrument shell, claims 8-14 are directed to a method for fabricating the outer surface of a hearing instrument, and claims 15-17 are directed to more specific methods for fabricating hearing instruments. All but claim 17 contain the phrase "imparting a texture" (which recites "create a texture"). The applicants respectfully suggest that claim 2 or 9 be relied upon to represent all three groups.

Argument

Rejections under 35 U.S.C. § 102 (Office Action, ¶¶ 2-7)

Six rejections were lodged against the claims under § 102 (items 1-6, above), based on the following:

- 1) Specification, p. 1, lines 4-10 (claims 1, 2, 8, and 9);
- 2) U.S. Patent No. 3,567,871 (Walter) (claims 1-3 and 8-10);
- 3) U.S. Patent No. 5,581,627 (Bowser et al.) (claims 1-3 and 8-10);
- 4) U.S. Patent No. 4,803,853 (Hoerkens) (claims 1-3, 6, 8-10, 13, and 16);
- 5) U.S. Patent No. 6,097,825 (Yoest et al.) (claims 1, 2, 4, 8, 9, and 11); and
- 6) U.S. Patent No. 6,595,317 (Widmer et al.) (claims 1-3, 5, 7-10, 12, and 14-17).

Each of these rejections encompasses independent claims 1, 2, 8, and 9. None of these citations discloses, teaches, or suggests "imparting a texture" to a hearing instrument surface or shell.

The Requirements for Anticipation have not been Met

To sustain a rejection based on anticipation under 35 U.S.C. § 102, "the reference must teach every element of the claim." M.P.E.P. § 2131 (8th ed., rev. 2, May 2004), page 2100-73. The M.P.E.P. goes on to state that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Further, "[d]uring patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification.'" M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-46, quoting In re Hyatt, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000). Additionally, "this interpretation must be consistent with the one that those skilled in the art would reach." In re Cortright, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-47 (last paragraph in the left-hand column).

The § 102 rejections do not satisfy the foregoing.

The Meaning of the Term "Texture"

Each of independent claims 1, 2, 8, and 9 contains the phrase "imparting a texture" (as do independent claims 15 and 16). The applicants provided a definition of texture in the specification as well as a citation to a standard engineering handbook to illustrate how they understand and use the term.

Texture is defined in part in the application on page 2, lines 8-13:

By creating a **textured, non-smooth finish** on the outer shell of a hearing instrument, the hearing instrument will more readily lodge and remain within the ear canal. Further, the **textured** finish has an appearance closer to that of **natural skin** and therefore the hearing instrument is less noticeable to others, blending in with the visible portions of the ear.

[Emphasis added.] To further illustrate the meaning of the term texture, the application further provides the following:

The actual characteristics of the **texture** employed may be quite varied and are a matter of design choice and suitability to the application. The particulars of surface **texture** are well established and discussed at length in "Surface-Texture Designation, Production, and Control," Marks' Standard Handbook for Mechanical Engineers, 9th ed., 1987, pages 13-75 through 13-81, incorporated by reference herein.

Page 6, lines 12-17 [emphasis added]. (A copy of the excerpt is attached to the certification of Martin W. Masters, filed April 30, 2004.)

Specification (claims 1, 2, 8, and 9) (office action, ¶ 2)

The section of the application relied upon in ¶ 2 of the office action is the background of the invention (page 1, lines 4-10):

Typically, hearing devices inserted in a user's ear have a smooth or glossy finish, and the manufacturing process often includes a polishing phase to insure such a finish. Although this may provide an aesthetically pleasing appearance, the unit may have a tendency to slip out unless it has been sized to create an interference fit, in turn possibly leading to discomfort. Also, its shiny surface will make the presence of the unit in one's ear obvious to others as light reflects off the exposed surface.

Here, the applicants outlined the problem they are attempting to solve. They have done so by "imparting a texture" to the shell or outer surface of a hearing instrument. The word "texture" and the phrase "imparting a texture" appear nowhere in this excerpt. Moreover, the "smooth or glossy finish" and the "shiny surface" described here are not textures as discussed and claimed by the applicants. Construed in a manner consistent with the specification, In re Hyatt, supra, the claims are not anticipated by this excerpt.

Walter and Bowser et al. (claims 1-3 and 8-10) (office action, ¶¶ 3 and 4)

All of the pending claims, including those rejected in view of these references, recite either a "hearing instrument" or a "hearing instrument shell," and must be construed in a manner consistent with the specification. In re Hyatt, supra. Neither Walter nor Bowser et al. concerns a "hearing instrument" -- Walter shows a telephone handset and Bowser et al. a pair of headphones. No one skilled in the art would confuse a telephone or headphones with a hearing instrument. In re Cortright, supra. Moreover, nowhere in Bowser et al. is there anything approaching the applicants' claimed "texture." Therefore, these references cannot anticipate the claimed invention. M.P.E.P. § 2131, supra.

Finally, there is no suggestion or teaching in either Walter or Bowser et al. to apply a texture to a hearing instrument to achieve the applicants' claimed method and, thus, the claims are similarly not obvious in view of these references. M.P.E.P. § 2143, supra.

Hoerkens (claims 1-3, 6, 8-10, 13, and 16) (office action, ¶ 5)

Hoerkens discusses attaching a mesh screen covering to a hearing aid but nowhere is there a suggestion to impart a texture to a hearing instrument or hearing instrument shell -- there is no modification of a hearing instrument or shell surface. Construed in light of the specification, the phrase "imparting a texture" does not read on Hoerkens' "ornamental ear insert" or the mesh screen covering - a component separate from Hoerkens' hearing aid. Since the reference lacks this claimed procedural step -- "imparting a texture" -- it cannot anticipate the independent claims (1, 2, 8, 9, and 16). M.P.E.P. § 2131, supra.

Further, the reference does not disclose, teach, or suggest the limitations of the dependent claims 3, 6, 10, and 13. Nor does Hoerkens provide any suggestion or teaching to modify his hearing aid to achieve the applicants' claimed method and, lacking such, the claims are also not obvious in view of Hoerkens. M.P.E.P. § 2143, supra.

In the section of the office action titled "Response to Arguments" (pp. 4-6, ¶¶ 10-13), a general dictionary definition of the word "texture" -- "identifying quality; character" -- is quoted in support of the rejection. Office Action, ¶ 10. Although a dictionary may be consulted, such a definition must agree with the usage of the term in the specification:

In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor.

M.P.E.P. § 2111.01 (8th ed., rev. 2, May 2004), page 2100-49, quoting Ferguson Beauregard/Logic Controls, Division of Dover Resources, Inc. v. Mega Systems, LLC, 350 F.3d 1327, 1338, 69 U.S.P.Q.2d 1001, 1009 (Fed. Cir. 2003) (quoting Brookhill-Wilk, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1300, 66 U.S.P.Q.2d 1517, 1520 (Fed. Cir. 2003)). The definition relied upon in the office action is not consistent with the use of the term in the specification; "identifying quality" and "character" have nothing to do with the claimed invention and the term "texture" as employed by the applicants. Therefore, this resort to such extrinsic evidence is improper.

Yuest et al. (claims 1, 2, 4, 8, 9, and 11) (office action, ¶ 6)

Claims 1, 2, 4, 8, 9, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,097,825 (Yuest et al.), specifically noting column 1, line 65, through column 2, line 2. (As noted, although claims 4 and 11 were cancelled in the previous amendment, the subsequent second office action retains a reference to these claims.) Yuest et al. does not disclose, teach, or suggest, there or anywhere within the document, the concept of imparting a texture as described in the specification. For at least the reasons set forth above with respect to the Hoerkens reference, claims 1, 2, 8, and 9 are allowable over the cited reference under §§ 102 and 103. M.P.E.P. §§ 2131 and 2143, supra.

Here again, the response to the argument concerning Yuest et al. (¶ 11 of the office action) relies on an inapposite dictionary definition.

Widmer et. al. (claims 1-3, 5, 7-10, 12, and 14-17) (office action, ¶ 7)

Claims 1-3, 5, 7-10, 12, and 14-17 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,595,317 (Widmer et al.). Widmer et al. does not satisfy the requirements for anticipation as it fails to disclose, teach, or suggest "imparting" or "creating" a surface texture; nowhere in the patent is there any mention of the word texture (or an equivalent thereto).

The office action specifically cites col. 13, lines 36-54, and Figures 18-20. These figures depict a "pattern of ribs 51" (column 12, line 56). Rather than modifying the surface of the shell itself, Widmer et al.'s surface remains smooth and untextured. Indeed, independent claims 1, 17, and 32 of Widmer et al. recite an "outer surface" that is "substantially smooth."

Further, Widmer et al. does not address the problems of slippage and appearance solved by the invention's textured surface. Rather, Widmer et al. adds grooves (for venting) or ribs to the shell for structural support, but otherwise not modifying the surface of the shell itself; Widmer et al.'s surface remains smooth and untextured:

Where desired, the **structural stability** of the skin of the shell, **smooth** on the **outside** in the design example shown, is assured by means of fins or ribs 47 integrated into the **inside** of the shell which ribs are of the same material as the skin of the shell.

Widmer et al., supra, column 12, lines 10-14 [emphasis added].

In lieu of or in addition to the targeted **wall reinforcement** and predefined bending and torsional characteristics, in short the **structural properties** of the in-ear custom-moulded ear-plug unit, the **inner ribbing** as shown in FIGS. 17 and 18 may be complemented by an outer rib pattern as mentioned further above. To that effect, as indicated in FIGS. 18 and 19, the outer surface of the custom-moulded ear-plug unit 49 is provided with a pattern of ribs 51 which may differ regionally in terms of their density, orientation and cross section.

Widmer et al., supra, column 12, lines 49-57 [emphasis added]. Figures 18-20 depict a "pattern of ribs 51" (column 11, line 42). Figure 21 illustrates a device having a "corrugated or bellows-like section 63" while the surface remains smooth (column 12, lines 34-35). None of these constitute a "texture" or the step of "imparting a texture" as described and claimed in the application.

The position set forth in the office actions urges an interpretation of the term "texture" and the phrase "imparting a texture" contrary to the manner in which they are used in the application and employed by those skilled in the art. The ribs on the otherwise smooth-surfaced shell of Widmer et al. no more constitute a "texture" than do speed bumps on an asphalt road surface. Nor can these ribs create the appearance of "natural skin" (discussed in the first quoted section above). Therefore, the examiner's construction of the term "texture" is improper. M.P.E.P. § 2111, In re Hyatt, and In re Cortright, supra.

Failing to disclose, teach, or suggest imparting or creating a texture on the surface of the shell or hearing instrument, Widmer et al. cannot anticipate the independent claims (1, 2, 8, 9, 15, 16, and 17). M.P.E.P. § 2131, supra. Further, the reference does not disclose, teach, or suggest the additional limitations of the dependent claims 3, 5, 7, 10, 12, and 14. Finally, Widmer et al. does not provide any suggestion or teaching to modify its device to achieve the applicants' claimed method of imparting or creating a texture and, lacking such, the claims are also not obvious in view of that reference. M.P.E.P. § 2143, supra.

Rejection under 35 U.S.C. § 103(a) (Office Action, ¶ 9)

Claims 6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,595,317 (Widmer et al.) in view of U.S. Patent No. 4,803,853 (Hoerkens). The office action states that "Hoerkens discloses applying waveforms to the edges of one or more of the layers during the process of fabrication...." The words "waveforms" and "layers" appear nowhere in Hoerkens and the cited portion (col. 1, lines 45-56) do not discuss any such process. To meet the claims, Hoerkens at a minimum would have to apply "waveforms" to the "layers" of a "shell." As it does not, Hoerkens is therefore inapposite and cannot contribute to finding of obviousness.

Claims 6 and 13 are not obvious in view of cited combination for at least two additional reasons. First, there is no teaching or suggestion in either of the references to make such a combination. The bald assertion alone that "it would have been obvious" to have made the necessary modifications to the references and then combine them as suggested in the office action cannot support a finding of obviousness. In re Lee, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002)(Board's affirmance of PTO's unsupported § 103 rejection reversed).

Indeed, the only motivation for such a combination is found in the claims and it is improper to use the claims in this fashion. M.P.E.P. § 2143 (8th ed., rev. 2, May 2004), page 2100-129 ("[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure"); In re Dembiczak, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999) ("[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight."); In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) ("rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'"). Absent a suggestion to combine the ornamental ear insert with the device of Widmer et al., the combination of Widmer et al. and Hoerkens is improper and cannot support a finding of obviousness.

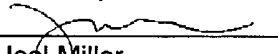
Second, even assuming *arguendo* that the combination would be proper, it still lacks the element of imparting a texture applied to a hearing instrument shell or outer surface, as discussed in greater detail with respect to the § 102 rejections based on Hoerkens and Widmer et al., respectively. M.P.E.P. § 2143.03 (8th ed., rev. 2, May 2004), p. 2100-133 ("[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art"), citing In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) [emphasis in original]. For at least these reasons, the combination of the references does not render claims 6 and 13 obvious.

Conclusion

Since the references do not anticipate nor render the claims obvious, the claims are allowable over the cited art and therefore the applicant respectfully requests that the Board reverse the examiner and direct that the application be passed to allowance.

Dated: July 27, 2004

Respectfully submitted,


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Appendix

1. Imparting a texture to a hearing instrument shell.
2. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell.
3. A method as set forth in claim 2, where imparting a texture comprises imparting a non-smooth texture.
5. A method as set forth in claim 2, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
6. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
7. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.
8. Imparting a texture to an outer surface of a hearing instrument.
9. A method of fabricating a hearing instrument, comprising:
fabricating an outer surface; and
imparting a texture to at least a portion of the outer surface.
10. A method as set forth in claim 9, where imparting a texture comprises imparting a non-smooth texture.
12. A method as set forth in claim 9, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
13. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
14. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.

15. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises

blasting the surface with an abrasive or grit; or
applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.

16. A method of fabricating a hearing instrument, comprising:
fabricating a shell as a series of layers; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises

applying waveforms to the edges of one or more of the layers during the process of fabrication; or

blasting the surface with an abrasive or grit; or
applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.

17. A method of fabricating a hearing instrument, comprising:
fabricating a mold cavity derived from surface contours of the user's ear; and
modifying the mold cavity to create a texture comprising

a series of lines, equally or unequally spaced; or
a plurality of regular or irregular repeating shapes; or
a predetermined or randomly generated pattern.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
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Certificate of Transmission
Pursuant to 37 C.F.R. § 1.8

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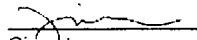
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Filed: August 31, 2001

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Group: 1734

Examiner: Michelle A. Lazor


SignatureJuly 27, 2004
Date of Signature

Att'y Dkt.: 2001 P 16282 US

Brief on AppealCommissioner for Patents
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The claims fall roughly into three groups: claims 1-7 are directed to a method for fabricating a hearing instrument shell, claims 8-14 are directed to a method for fabricating the outer surface of a hearing instrument, and claims 15-17 are directed to more specific methods for fabricating hearing instruments. All but claim 17 contain the phrase "imparting a texture" (which recites "create a texture"). The applicants respectfully suggest that claim 2 or 9 be relied upon to represent all three groups.

Argument

Rejections under 35 U.S.C. § 102 (Office Action, ¶¶ 2-7)

Six rejections were lodged against the claims under § 102 (items 1-6, above), based on the following:

- 1) Specification, p. 1, lines 4-10 (claims 1, 2, 8, and 9);
- 2) U.S. Patent No. 3,567,871 (Walter) (claims 1-3 and 8-10);
- 3) U.S. Patent No. 5,581,627 (Bowser et al.) (claims 1-3 and 8-10);
- 4) U.S. Patent No. 4,803,853 (Hoerkens) (claims 1-3, 6, 8-10, 13, and 16);
- 5) U.S. Patent No. 6,097,825 (Yoest et al.) (claims 1, 2, 4, 8, 9, and 11); and
- 6) U.S. Patent No. 6,595,317 (Widmer et al.) (claims 1-3, 5, 7-10, 12, and 14-17).

Each of these rejections encompasses independent claims 1, 2, 8, and 9. None of these citations discloses, teaches, or suggests "imparting a texture" to a hearing instrument surface or shell.

The Requirements for Anticipation have not been Met

To sustain a rejection based on anticipation under 35 U.S.C. § 102, "the reference must teach every element of the claim." M.P.E.P. § 2131 (8th ed., rev. 2, May 2004), page 2100-73. The M.P.E.P. goes on to state that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Further, "[d]uring patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification.'" M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-46, quoting In re Hyatt, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000). Additionally, "this interpretation must be consistent with the one that those skilled in the art would reach." In re Cortright, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-47 (last paragraph in the left-hand column).

The § 102 rejections do not satisfy the foregoing.

The Meaning of the Term "Texture"

Each of independent claims 1, 2, 8, and 9 contains the phrase "imparting a texture" (as do independent claims 15 and 16). The applicants provided a definition of texture in the specification as well as a citation to a standard engineering handbook to illustrate how they understand and use the term.

Texture is defined in part in the application on page 2, lines 8-13:

By creating a **textured, non-smooth finish** on the outer shell of a hearing instrument, the hearing instrument will more readily lodge and remain within the ear canal. Further, the **textured** finish has an appearance closer to that of **natural skin** and therefore the hearing instrument is less noticeable to others, blending in with the visible portions of the ear.

[Emphasis added.] To further illustrate the meaning of the term texture, the application further provides the following:

The actual characteristics of the **texture** employed may be quite varied and are a matter of design choice and suitability to the application. The particulars of surface **texture** are well established and discussed at length in "Surface-Texture Designation, Production, and Control," Marks' Standard Handbook for Mechanical Engineers, 9th ed., 1987, pages 13-75 through 13-81, incorporated by reference herein.

Page 6, lines 12-17 [emphasis added]. (A copy of the excerpt is attached to the certification of Martin W. Masters, filed April 30, 2004.)

Specification (claims 1, 2, 8, and 9) (office action, ¶ 2)

The section of the application relied upon in ¶ 2 of the office action is the background of the invention (page 1, lines 4-10):

Typically, hearing devices inserted in a user's ear have a smooth or glossy finish, and the manufacturing process often includes a polishing phase to insure such a finish. Although this may provide an aesthetically pleasing appearance, the unit may have a tendency to slip out unless it has been sized to create an interference fit, in turn possibly leading to discomfort. Also, its shiny surface will make the presence of the unit in one's ear obvious to others as light reflects off the exposed surface.

Here, the applicants outlined the problem they are attempting to solve. They have done so by "imparting a texture" to the shell or outer surface of a hearing instrument. The word "texture" and the phrase "imparting a texture" appear nowhere in this excerpt. Moreover, the "smooth or glossy finish" and the "shiny surface" described here are not textures as discussed and claimed by the applicants. Construed in a manner consistent with the specification, In re Hyatt, supra, the claims are not anticipated by this excerpt.

Walter and Bowser et al. (claims 1-3 and 8-10) (office action, ¶¶ 3 and 4)

All of the pending claims, including those rejected in view of these references, recite either a "hearing instrument" or a "hearing instrument shell," and must be construed in a manner consistent with the specification. In re Hyatt, supra. Neither Walter nor Bowser et al. concerns a "hearing instrument" -- Walter shows a telephone handset and Bowser et al. a pair of headphones. No one skilled in the art would confuse a telephone or headphones with a hearing instrument. In re Cortright, supra. Moreover, nowhere in Bowser et al. is there anything approaching the applicants' claimed "texture." Therefore, these references cannot anticipate the claimed invention. M.P.E.P. § 2131, supra.

Finally, there is no suggestion or teaching in either Walter or Bowser et al. to apply a texture to a hearing instrument to achieve the applicants' claimed method and, thus, the claims are similarly not obvious in view of these references. M.P.E.P. § 2143, supra.

Hoerkens (claims 1-3, 6, 8-10, 13, and 16) (office action, ¶ 5)

Hoerkens discusses attaching a mesh screen covering to a hearing aid but nowhere is there a suggestion to impart a texture to a hearing instrument or hearing instrument shell -- there is no modification of a hearing instrument or shell surface. Construed in light of the specification, the phrase "imparting a texture" does not read on Hoerkens' "ornamental ear insert" or the mesh screen covering - a component separate from Hoerkens' hearing aid. Since the reference lacks this claimed procedural step -- "imparting a texture" -- it cannot anticipate the independent claims (1, 2, 8, 9, and 16). M.P.E.P. § 2131, supra.

Further, the reference does not disclose, teach, or suggest the limitations of the dependent claims 3, 6, 10, and 13. Nor does Hoerkens provide any suggestion or teaching to modify his hearing aid to achieve the applicants' claimed method and, lacking such, the claims are also not obvious in view of Hoerkens. M.P.E.P. § 2143, supra.

In the section of the office action titled "Response to Arguments" (pp. 4-6, ¶¶ 10-13), a general dictionary definition of the word "texture" -- "identifying quality; character" -- is quoted in support of the rejection. Office Action, ¶ 10. Although a dictionary may be consulted, such a definition must agree with the usage of the term in the specification:

In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor.

M.P.E.P. § 2111.01 (8th ed., rev. 2, May 2004), page 2100-49, quoting Ferguson Beauregard/Logic Controls, Division of Dover Resources, Inc. v. Mega Systems, LLC, 350 F.3d 1327, 1338, 69 U.S.P.Q.2d 1001, 1009 (Fed. Cir. 2003) (quoting Brookhill-Wilk, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1300, 66 U.S.P.Q.2d 1517, 1520 (Fed. Cir. 2003)). The definition relied upon in the office action is not consistent with the use of the term in the specification; "identifying quality" and "character" have nothing to do with the claimed invention and the term "texture" as employed by the applicants. Therefore, this resort to such extrinsic evidence is improper.

Yuest et al. (claims 1, 2, 4, 8, 9, and 11) (office action, ¶ 6)

Claims 1, 2, 4, 8, 9, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,097,825 (Yuest et al.), specifically noting column 1, line 65, through column 2, line 2. (As noted, although claims 4 and 11 were cancelled in the previous amendment, the subsequent second office action retains a reference to these claims.) Yuest et al. does not disclose, teach, or suggest, there or anywhere within the document, the concept of imparting a texture as described in the specification. For at least the reasons set forth above with respect to the Hoerkens reference, claims 1, 2, 8, and 9 are allowable over the cited reference under §§ 102 and 103. M.P.E.P. §§ 2131 and 2143, supra.

Here again, the response to the argument concerning Yuest et al. (¶ 11 of the office action) relies on an inapposite dictionary definition.

Widmer et. al. (claims 1-3, 5, 7-10, 12, and 14-17) (office action, ¶ 7)

Claims 1-3, 5, 7-10, 12, and 14-17 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,595,317 (Widmer et al.). Widmer et al. does not satisfy the requirements for anticipation as it fails to disclose, teach, or suggest "imparting" or "creating" a surface texture; nowhere in the patent is there any mention of the word texture (or an equivalent thereto).

The office action specifically cites col. 13, lines 36-54, and Figures 18-20. These figures depict a "pattern of ribs 51" (column 12, line 56). Rather than modifying the surface of the shell itself, Widmer et al.'s surface remains smooth and untextured. Indeed, independent claims 1, 17, and 32 of Widmer et al. recite an "outer surface" that is "substantially smooth."

Further, Widmer et al. does not address the problems of slippage and appearance solved by the invention's textured surface. Rather, Widmer et al. adds grooves (for venting) or ribs to the shell for structural support, but otherwise not modifying the surface of the shell itself; Widmer et al.'s surface remains smooth and untextured:

Where desired, the **structural stability** of the skin of the shell, **smooth** on the **outside** in the design example shown, is assured by means of fins or ribs 47 integrated into the **inside** of the shell which ribs are of the same material as the skin of the shell.

Widmer et al., supra, column 12, lines 10-14 [emphasis added].

In lieu of or in addition to the targeted **wall reinforcement** and predefined bending and torsional characteristics, in short the **structural properties** of the in-ear custom-moulded ear-plug unit, the **inner** ribbing as shown in FIGS. 17 and 18 may be complemented by an outer rib pattern as mentioned further above. To that effect, as indicated in FIGS. 18 and 19, the outer surface of the custom-moulded ear-plug unit 49 is provided with a pattern of ribs 51 which may differ regionally in terms of their density, orientation and cross section.

Widmer et al., supra, column 12, lines 49-57 [emphasis added]. Figures 18-20 depict a "pattern of ribs 51" (column 11, line 42). Figure 21 illustrates a device having a "corrugated or bellows-like section 63" while the surface remains smooth (column 12, lines 34-35). None of these constitute a "texture" or the step of "imparting a texture" as described and claimed in the application.

The position set forth in the office actions urges an interpretation of the term "texture" and the phrase "imparting a texture" contrary to the manner in which they are used in the application and employed by those skilled in the art. The ribs on the otherwise smooth-surfaced shell of Widmer et al. no more constitute a "texture" than do speed bumps on an asphalt road surface. Nor can these ribs create the appearance of "natural skin" (discussed in the first quoted section above). Therefore, the examiner's construction of the term "texture" is improper. M.P.E.P. § 2111, In re Hyatt, and In re Cortright, supra.

Failing to disclose, teach, or suggest imparting or creating a texture on the surface of the shell or hearing instrument, Widmer et al. cannot anticipate the independent claims (1, 2, 8, 9, 15, 16, and 17). M.P.E.P. § 2131, supra. Further, the reference does not disclose, teach, or suggest the additional limitations of the dependent claims 3, 5, 7, 10, 12, and 14. Finally, Widmer et al. does not provide any suggestion or teaching to modify its device to achieve the applicants' claimed method of imparting or creating a texture and, lacking such, the claims are also not obvious in view of that reference. M.P.E.P. § 2143, supra.

Rejection under 35 U.S.C. § 103(a) (Office Action, ¶ 9)

Claims 6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,595,317 (Widmer et al.) in view of U.S. Patent No. 4,803,853 (Hoerkens). The office action states that "Hoerkens discloses applying waveforms to the edges of one or more of the layers during the process of fabrication...." The words "waveforms" and "layers" appear nowhere in Hoerkens and the cited portion (col. 1, lines 45-56) do not discuss any such process. To meet the claims, Hoerkens at a minimum would have to apply "waveforms" to the "layers" of a "shell." As it does not, Hoerkens is therefore inapposite and cannot contribute to finding of obviousness.

Claims 6 and 13 are not obvious in view of cited combination for at least two additional reasons. First, there is no teaching or suggestion in either of the references to make such a combination. The bald assertion alone that "it would have been obvious" to have made the necessary modifications to the references and then combine them as suggested in the office action cannot support a finding of obviousness. *In re Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002)(Board's affirmance of PTO's unsupported § 103 rejection reversed).

Indeed, the only motivation for such a combination is found in the claims and it is improper to use the claims in this fashion. M.P.E.P. § 2143 (8th ed., rev. 2, May 2004), page 2100-129 ("[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure"); *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999) ("[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight."); *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) ("rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'"). Absent a suggestion to combine the ornamental ear insert with the device of Widmer et al., the combination of Widmer et al. and Hoerkens is improper and cannot support a finding of obviousness.

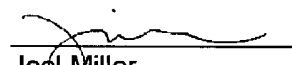
Second, even assuming arguendo that the combination would be proper, it still lacks the element of imparting a texture applied to a hearing instrument shell or outer surface, as discussed in greater detail with respect to the § 102 rejections based on Hoerkens and Widmer et al., respectively. M.P.E.P. § 2143.03 (8th ed., rev. 2, May 2004), p. 2100-133 ("[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art"), citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) [emphasis in original]. For at least these reasons, the combination of the references does not render claims 6 and 13 obvious.

Conclusion

Since the references do not anticipate nor render the claims obvious, the claims are allowable over the cited art and therefore the applicant respectfully requests that the Board reverse the examiner and direct that the application be passed to allowance.

Dated: July 27, 2004

Respectfully submitted,


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Appendix

1. Imparting a texture to a hearing instrument shell.
2. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell.
3. A method as set forth in claim 2, where imparting a texture comprises imparting a non-smooth texture.
5. A method as set forth in claim 2, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
6. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
7. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.
8. Imparting a texture to an outer surface of a hearing instrument.
9. A method of fabricating a hearing instrument, comprising:
fabricating an outer surface; and
imparting a texture to at least a portion of the outer surface.
10. A method as set forth in claim 9, where imparting a texture comprises imparting a non-smooth texture.
12. A method as set forth in claim 9, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
13. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
14. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.

15. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises
 - blasting the surface with an abrasive or grit; or
 - applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
16. A method of fabricating a hearing instrument, comprising:
fabricating a shell as a series of layers; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises
 - applying waveforms to the edges of one or more of the layers during the process of fabrication; or
 - blasting the surface with an abrasive or grit; or
 - applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
17. A method of fabricating a hearing instrument, comprising:
fabricating a mold cavity derived from surface contours of the user's ear; and
modifying the mold cavity to create a texture comprising
 - a series of lines, equally or unequally spaced; or
 - a plurality of regular or irregular repeating shapes; or
 - a predetermined or randomly generated pattern.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

JUL 27 2004

Applicant: M. Masters et al.

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Serial No.: 09/944,314

For: Processes for texturing the surface
of a hearing instrument

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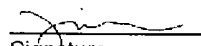
Filed: August 31, 2001

Joel Miller
Attorney Name

29,955
Reg. No.

Group: 1734

Examiner: Michelle A. Lazor


Signature

July 27, 2004
Date of Signature

Att'y Dkt.: 2001 P 16282 US

Brief on Appeal

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P.O. Box 1450
Alexandria, VA 22313-1450

Via Facsimile Only

Sir:

This brief is in support of the applicant's July 27, 2004 notice of appeal of the second, non-final rejection of the claims.

Real Party in Interest

Siemens Hearing Instruments, Inc., Piscataway, NJ.

Related Appeals and Interferences

Application No. 09/944,315, notice of appeal and appeal brief filed May 4, 2004.

Status of Claims

Claims 1-3, 5-10, and 12-17 are pending in this application. In the second, non-final office action mailed May 18, 2004:

1) claims 1, 2, 8, and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by the specification, page 1 (not page 2), lines 4-10 (office action, ¶ 2);

2) claims 1-3 and 8-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,567,871 (Walter) (office action, ¶ 3);

3) claims 1-3 and 8-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,581,627 (Bowser et al.) (office action, ¶ 4);

4) claims 1-3, 6, 8-10, 13, and 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,803,853 (Hoerkens) (office action, ¶ 5);

5) claims 1, 2, 4, 8, 9, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,097,825 (Yoest et al.) (office action, ¶ 6) [note: claims 4 and 11 were cancelled in the preceding amendment and will not be addressed here];

6) claims 1-3, 5, 7-10, 12, and 14-17 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,595,317 (Widmer et al.) (office action, ¶ 7); and

7) claims 6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,595,317 (Widmer et al.) in view of U.S. Patent No. 4,803,853 (Hoerkens) (office action, ¶ 9).

All of the rejections of the claims are appealed.

Status of Amendments

No amendments were submitted after the final rejection.

Summary of the Invention

Hearing devices inserted in a user's ear typically have a smooth or glossy finish, and the manufacturing process often includes a polishing phase to maintain such a finish. Although this may provide an aesthetically pleasing appearance, the instrument may have a tendency to slip out unless sized to create an interference fit, which could cause discomfort. Also, a shiny, light-reflective surface will make the presence of the unit in one's ear obvious to others.

To prevent the hearing instrument from slipping out of the ear and to create an outward appearance that blends with the wearer's ear, the outer surface of a hearing instrument shell is given a textured, non-smooth finish.

While the claims in the related application (no. 09/314,415) are directed to the structure - a textured hearing instrument or shell, this application is directed to the method of imparting or creating such a texture on the surface of a hearing instrument or hearing instrument shell.

Issues

The claims are not anticipated nor rendered obvious because they have not been properly construed and the cited references fail to disclose all of the claimed elements.

In the first office action, the claims were rejected under §§ 102 and 103 based on three references. In response, the applicants pointed out that the prior art rejections were formulated on an improper construction of the claims -- an overly-broad interpretation of the term "texture." The application specifically delineates the meaning of the term "texture" and the method of applying a texture to a hearing instrument or shell. As a direct consequence of not properly construing the terms of the claims, the references fail to meet the claim limitations, namely, they do not disclose the applicants' texture.

Notwithstanding the applicants' argument, the second office action repeated the very same art rejections, adding two more based upon art even further removed from the subject matter of the invention. As explained below, these two additional citations and rejections suffer from the same infirmity as the others. The weakness of these rejections is underscored by the non-final stature of the second office action.

The applicants have already demonstrated the inappropriateness of the art cited herein, but this art has been cited once again. The issue on this point has therefore been joined and, rather than reiterate unsuccessful arguments in a response to the outstanding office action, the applicants have elected to utilize their appeal rights.

Grouping of Claims

The claims fall roughly into three groups: claims 1-7 are directed to a method for fabricating a hearing instrument shell, claims 8-14 are directed to a method for fabricating the outer surface of a hearing instrument, and claims 15-17 are directed to more specific methods for fabricating hearing instruments. All but claim 17 contain the phrase "imparting a texture" (which recites "create a texture"). The applicants respectfully suggest that claim 2 or 9 be relied upon to represent all three groups.

Argument

Rejections under 35 U.S.C. § 102 (Office Action, ¶¶ 2-7)

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- 4) U.S. Patent No. 4,803,853 (Hoerkens) (claims 1-3, 6, 8-10, 13, and 16);
- 5) U.S. Patent No. 6,097,825 (Yoenst et al.) (claims 1, 2, 4, 8, 9, and 11); and
- 6) U.S. Patent No. 6,595,317 (Widmer et al.) (claims 1-3, 5, 7-10, 12, and 14-17).

Each of these rejections encompasses independent claims 1, 2, 8, and 9. None of these citations discloses, teaches, or suggests "imparting a texture" to a hearing instrument surface or shell.

The Requirements for Anticipation have not been Met

To sustain a rejection based on anticipation under 35 U.S.C. § 102, "the reference must teach every element of the claim." M.P.E.P. § 2131 (8th ed., rev. 2, May 2004), page 2100-73. The M.P.E.P. goes on to state that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Further, "[d]uring patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification.'" M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-46, quoting In re Hyatt, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000). Additionally, "this interpretation must be consistent with the one that those skilled in the art would reach." In re Cortright, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111 (8th ed., rev. 2, May 2004), page 2100-47 (last paragraph in the left-hand column).

The § 102 rejections do not satisfy the foregoing.

The Meaning of the Term "Texture"

Each of independent claims 1, 2, 8, and 9 contains the phrase "imparting a texture" (as do independent claims 15 and 16). The applicants provided a definition of texture in the specification as well as a citation to a standard engineering handbook to illustrate how they understand and use the term.

Texture is defined in part in the application on page 2, lines 8-13:

By creating a **textured, non-smooth finish** on the outer shell of a hearing instrument, the hearing instrument will more readily lodge and remain within the ear canal. Further, the **textured** finish has an appearance closer to that of **natural skin** and therefore the hearing instrument is less noticeable to others, blending in with the visible portions of the ear.

[Emphasis added.] To further illustrate the meaning of the term texture, the application further provides the following:

The actual characteristics of the **texture** employed may be quite varied and are a matter of design choice and suitability to the application. The particulars of surface **texture** are well established and discussed at length in "Surface-Texture Designation, Production, and Control," Marks' Standard Handbook for Mechanical Engineers, 9th ed., 1987, pages 13-75 through 13-81, incorporated by reference herein.

Page 6, lines 12-17 [emphasis added]. (A copy of the excerpt is attached to the certification of Martin W. Masters, filed April 30, 2004.)

Specification (claims 1, 2, 8, and 9) (office action, ¶ 2)

The section of the application relied upon in ¶ 2 of the office action is the background of the invention (page 1, lines 4-10):

Typically, hearing devices inserted in a user's ear have a smooth or glossy finish, and the manufacturing process often includes a polishing phase to insure such a finish. Although this may provide an aesthetically pleasing appearance, the unit may have a tendency to slip out unless it has been sized to create an interference fit, in turn possibly leading to discomfort. Also, its shiny surface will make the presence of the unit in one's ear obvious to others as light reflects off the exposed surface.

Here, the applicants outlined the problem they are attempting to solve. They have done so by "imparting a texture" to the shell or outer surface of a hearing instrument. The word "texture" and the phrase "imparting a texture" appear nowhere in this excerpt. Moreover, the "smooth or glossy finish" and the "shiny surface" described here are not textures as discussed and claimed by the applicants. Construed in a manner consistent with the specification, In re Hyatt, supra, the claims are not anticipated by this excerpt.

Walter and Bowser et al. (claims 1-3 and 8-10) (office action, ¶¶ 3 and 4)

All of the pending claims, including those rejected in view of these references, recite either a "hearing instrument" or a "hearing instrument shell," and must be construed in a manner consistent with the specification. In re Hyatt, supra. Neither Walter nor Bowser et al. concerns a "hearing instrument" -- Walter shows a telephone handset and Bowser et al. a pair of headphones. No one skilled in the art would confuse a telephone or headphones with a hearing instrument. In re Cortright, supra. Moreover, nowhere in Bowser et al. is there anything approaching the applicants' claimed "texture." Therefore, these references cannot anticipate the claimed invention. M.P.E.P. § 2131, supra.

Finally, there is no suggestion or teaching in either Walter or Bowser et al. to apply a texture to a hearing instrument to achieve the applicants' claimed method and, thus, the claims are similarly not obvious in view of these references. M.P.E.P. § 2143, supra.

Hoerkens (claims 1-3, 6, 8-10, 13, and 16) (office action, ¶ 5)

Hoerkens discusses attaching a mesh screen covering to a hearing aid but nowhere is there a suggestion to impart a texture to a hearing instrument or hearing instrument shell -- there is no modification of a hearing instrument or shell surface. Construed in light of the specification, the phrase "imparting a texture" does not read on Hoerkens' "ornamental ear insert" or the mesh screen covering - a component separate from Hoerkens' hearing aid. Since the reference lacks this claimed procedural step -- "imparting a texture" -- it cannot anticipate the independent claims (1, 2, 8, 9, and 16). M.P.E.P. § 2131, supra.

Further, the reference does not disclose, teach, or suggest the limitations of the dependent claims 3, 6, 10, and 13. Nor does Hoerkens provide any suggestion or teaching to modify his hearing aid to achieve the applicants' claimed method and, lacking such, the claims are also not obvious in view of Hoerkens. M.P.E.P. § 2143, supra.

In the section of the office action titled "Response to Arguments" (pp. 4-6, ¶¶ 10-13), a general dictionary definition of the word "texture" -- "identifying quality; character" -- is quoted in support of the rejection. Office Action, ¶ 10. Although a dictionary may be consulted, such a definition must agree with the usage of the term in the specification:

In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor.

M.P.E.P. § 2111.01 (8th ed., rev. 2, May 2004), page 2100-49, quoting Ferguson Beauregard/Logic Controls, Division of Dover Resources, Inc. v. Mega Systems, LLC, 350 F.3d 1327, 1338, 69 U.S.P.Q.2d 1001, 1009 (Fed. Cir. 2003) (quoting Brookhill-Wilk, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1300, 66 U.S.P.Q.2d 1517, 1520 (Fed. Cir. 2003)). The definition relied upon in the office action is not consistent with the use of the term in the specification; "identifying quality" and "character" have nothing to do with the claimed invention and the term "texture" as employed by the applicants. Therefore, this resort to such extrinsic evidence is improper.

Yuest et al. (claims 1, 2, 4, 8, 9, and 11) (office action, ¶ 6)

Claims 1, 2, 4, 8, 9, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,097,825 (Yuest et al.), specifically noting column 1, line 65, through column 2, line 2. (As noted, although claims 4 and 11 were cancelled in the previous amendment, the subsequent second office action retains a reference to these claims.) Yuest et al. does not disclose, teach, or suggest, there or anywhere within the document, the concept of imparting a texture as described in the specification. For at least the reasons set forth above with respect to the Hoerkens reference, claims 1, 2, 8, and 9 are allowable over the cited reference under §§ 102 and 103. M.P.E.P. §§ 2131 and 2143, supra.

Here again, the response to the argument concerning Yuest et al. (¶ 11 of the office action) relies on an inapposite dictionary definition.

Widmer et. al. (claims 1-3, 5, 7-10, 12, and 14-17) (office action, ¶ 7)

Claims 1-3, 5, 7-10, 12, and 14-17 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,595,317 (Widmer et al.). Widmer et al. does not satisfy the requirements for anticipation as it fails to disclose, teach, or suggest "imparting" or "creating" a surface texture; nowhere in the patent is there any mention of the word texture (or an equivalent thereto).

The office action specifically cites col. 13, lines 36-54, and Figures 18-20. These figures depict a "pattern of ribs 51" (column 12, line 56). Rather than modifying the surface of the shell itself, Widmer et al.'s surface remains smooth and untextured. Indeed, independent claims 1, 17, and 32 of Widmer et al. recite an "outer surface" that is "substantially smooth."

Further, Widmer et al. does not address the problems of slippage and appearance solved by the invention's textured surface. Rather, Widmer et al. adds grooves (for venting) or ribs to the shell for structural support, but otherwise not modifying the surface of the shell itself; Widmer et al.'s surface remains smooth and untextured:

Where desired, the **structural stability** of the skin of the shell, **smooth** on the **outside** in the design example shown, is assured by means of fins or ribs 47 integrated into the **inside** of the shell which ribs are of the same material as the skin of the shell.

Widmer et al., supra, column 12, lines 10-14 [emphasis added].

In lieu of or in addition to the targeted **wall reinforcement** and predefined bending and torsional characteristics, in short the **structural properties** of the in-ear custom-moulded ear-plug unit, the **inner** ribbing as shown in FIGS. 17 and 18 may be complemented by an outer rib pattern as mentioned further above. To that effect, as indicated in FIGS. 18 and 19, the outer surface of the custom-moulded ear-plug unit 49 is provided with a pattern of ribs 51 which may differ regionally in terms of their density, orientation and cross section.

Widmer et al., supra, column 12, lines 49-57 [emphasis added]. Figures 18-20 depict a "pattern of ribs 51" (column 11, line 42). Figure 21 illustrates a device having a "corrugated or bellows-like section 63" while the surface remains smooth (column 12, lines 34-35). None of these constitute a "texture" or the step of "imparting a texture" as described and claimed in the application.

The position set forth in the office actions urges an interpretation of the term "texture" and the phrase "imparting a texture" contrary to the manner in which they are used in the application and employed by those skilled in the art. The ribs on the otherwise smooth-surfaced shell of Widmer et al. no more constitute a "texture" than do speed bumps on an asphalt road surface. Nor can these ribs create the appearance of "natural skin" (discussed in the first quoted section above). Therefore, the examiner's construction of the term "texture" is improper. M.P.E.P. § 2111, In re Hyatt, and In re Cortright, supra.

Failing to disclose, teach, or suggest imparting or creating a texture on the surface of the shell or hearing instrument, Widmer et al. cannot anticipate the independent claims (1, 2, 8, 9, 15, 16, and 17). M.P.E.P. § 2131, supra. Further, the reference does not disclose, teach, or suggest the additional limitations of the dependent claims 3, 5, 7, 10, 12, and 14. Finally, Widmer et al. does not provide any suggestion or teaching to modify its device to achieve the applicants' claimed method of imparting or creating a texture and, lacking such, the claims are also not obvious in view of that reference. M.P.E.P. § 2143, supra.

Rejection under 35 U.S.C. § 103(a) (Office Action, ¶ 9)

Claims 6 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,595,317 (Widmer et al.) in view of U.S. Patent No. 4,803,853 (Hoerkens). The office action states that "Hoerkens discloses applying waveforms to the edges of one or more of the layers during the process of fabrication...." The words "waveforms" and "layers" appear nowhere in Hoerkens and the cited portion (col. 1, lines 45-56) do not discuss any such process. To meet the claims, Hoerkens at a minimum would have to apply "waveforms" to the "layers" of a "shell." As it does not, Hoerkens is therefore inapposite and cannot contribute to finding of obviousness.

Claims 6 and 13 are not obvious in view of cited combination for at least two additional reasons. First, there is no teaching or suggestion in either of the references to make such a combination. The bald assertion alone that "it would have been obvious" to have made the necessary modifications to the references and then combine them as suggested in the office action cannot support a finding of obviousness. *In re Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002)(Board's affirmance of PTO's unsupported § 103 rejection reversed).

Indeed, the only motivation for such a combination is found in the claims and it is improper to use the claims in this fashion. M.P.E.P. § 2143 (8th ed., rev. 2, May 2004), page 2100-129 ("[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure"); *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999) ("[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight."); *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) ("rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'"). Absent a suggestion to combine the ornamental ear insert with the device of Widmer et al., the combination of Widmer et al. and Hoerkens is improper and cannot support a finding of obviousness.

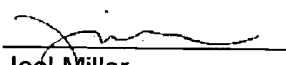
Second, even assuming arguendo that the combination would be proper, it still lacks the element of a imparting a texture applied to a hearing instrument shell or outer surface, as discussed in greater detail with respect to the § 102 rejections based on Hoerkens and Widmer et al., respectively. M.P.E.P. § 2143.03 (8th ed., rev. 2, May 2004), p. 2100-133 ("[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art"), citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) [emphasis in original]. For at least these reasons, the combination of the references does not render claims 6 and 13 obvious.

Conclusion

Since the references do not anticipate nor render the claims obvious, the claims are allowable over the cited art and therefore the applicant respectfully requests that the Board reverse the examiner and direct that the application be passed to allowance.

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Respectfully submitted,


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Appendix

1. Imparting a texture to a hearing instrument shell.
2. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell.
3. A method as set forth in claim 2, where imparting a texture comprises imparting a non-smooth texture.
5. A method as set forth in claim 2, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
6. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
7. A method as set forth in claim 2, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.
8. Imparting a texture to an outer surface of a hearing instrument.
9. A method of fabricating a hearing instrument, comprising:
fabricating an outer surface; and
imparting a texture to at least a portion of the outer surface.
10. A method as set forth in claim 9, where imparting a texture comprises imparting a non-smooth texture.
12. A method as set forth in claim 9, where imparting a texture comprises blasting the surface with an abrasive or grit, or applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
13. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a series of layers; and
imparting a texture comprises applying waveforms to the edges of one or more of the layers during the process of fabrication.
14. A method as set forth in claim 9, where:
fabricating a shell comprises fabricating a mold cavity derived from surface contours of the user's ear; and
imparting a texture comprises modifying the mold cavity to create a texture in the outer surface.

15. A method of fabricating a hearing instrument, comprising:
fabricating a shell comprising an outer surface; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises
 blasting the surface with an abrasive or grit; or
 applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
16. A method of fabricating a hearing instrument, comprising:
fabricating a shell as a series of layers; and
imparting a texture to at least a portion of the outer surface of the shell, where imparting a texture comprises
 applying waveforms to the edges of one or more of the layers during the process of fabrication; or
 blasting the surface with an abrasive or grit; or
 applying ultraviolet light, laser, infrared heat, hot air, or another heat source to the surface.
17. A method of fabricating a hearing instrument, comprising:
fabricating a mold cavity derived from surface contours of the user's ear; and
modifying the mold cavity to create a texture comprising
 a series of lines, equally or unequally spaced; or
 a plurality of regular or irregular repeating shapes; or
 a predetermined or randomly generated pattern.